

## **CURRICULUM VITAE**

Andrea J. Schilling

### EDUCATION:

M.S. Earth Sciences, Indiana University, Indianapolis, IN, March 2010

Thesis: Reconstructing past Antarctic ice flow paths in the Ross Embayment, Antarctica using sand petrography, particle size and detrital zircon provenance

B.A. Geological Science, Indiana University Purdue University  
Indianapolis, IN, December 2007

- Dean's List: Fall 2005 / Fall 2007

### FELLOWSHIPS AND AWARDS:

- IUPUI Urban Educators GK-12 Program , May 2008- May 2009  
Funded by the National Science Foundation
- Graduate Fellowship, August 2009- December 2009  
Funded by the IUPUI School of Science
- Posters on the Hill Scholar, 2008

### ACADEMIC EXPERIENCES:

Geology Department Sediment Analysis Lab Technician, Aug. 2006-Present

- Preparation of samples for the Malvern Laser Particle Size Analyzer
- Sieving samples for use on the Siemens D5000 X-ray Diffractometer
- Preparation of grain mounts and thin sections from samples in East Antarctica
- Classification of pebbles from East Antarctica

Field and Research Experience

- Assisted in sampling and coring wetland sediment at the Whitley Co. Wetland, IN and the Van Wert Co. Wetland, OH (July, 2009)
- Assisted in sampling surface water and shallow ground water, Leary Weber Ditch, Hancock County, IN (Spring, 2009)
- Teacher's assistant in the G120 Lab field investigation, Cagle's Mill, IN (Fall, 2008)
- Sample preparation and XRD collection at the Institute of Arctic and Alpine Research, Univ. of Colorado (Oct, 2007)
- Field mapping and field investigation of the San Bernardino Mountains, California (2006)
- Assisted in an education outreach program involving 6<sup>th</sup>, 7<sup>th</sup>, and 8<sup>th</sup> grade teachers, a National Science Foundation (NSF) funded research project (2005)

#### Funded Research Proposals

- The American Quaternary Student Travel Award (2008)  
The American Quaternary Association Biennial Meeting, State College, PA  
Funded: \$350.00
- IUPUI Education Enhancement Research grant (2008)  
Title: Reconstructing past Antarctic ice flow paths using detrital zircon provenance  
Funded: \$500.00
- IUPUI Undergraduate Travel Grant (2008)  
Geological Society of America Conference, Denver, CO  
Funded \$600.00
- IUPUI Undergraduate Research Opportunities Program (UROP) (2007)  
Title: X-ray diffraction analysis of glacial till from the Nimrod and Byrd Glaciers, Antarctica  
Funded \$1,000

#### ABSTRACTS:

- Schilling, A., Licht, K., 2009, Reconstructing past Antarctic ice flow paths using detrital zircon provenance: The West Antarctic Ice Sheet Initiative Annual Meeting, Eatonville, Washington
- Townsend, J., Licht, K., Schilling, A., 2009, Provenance Implications Of Cenozoic Basalt in East Antarctica, The West Antarctic Ice Sheet Initiative Annual Meeting, Eatonville, Washington
- Schilling, A., Licht, K., 2008, X-ray diffraction analysis of glacial till from the Nimrod and Byrd Glaciers, Antarctica: The American Quaternary Association Biennial Meeting, The Pennsylvania State University
- Schilling, A., 2008, X-ray diffraction analysis of glacial till from the Nimrod and Byrd Glaciers, Antarctica: Posters on the Hill, Council on Undergraduate Research, Washington, D.C.
- Schilling, A., 2007, X-ray diffraction analysis of glacial till from the Nimrod and Byrd Glaciers, Antarctica: 2007 IUPUI UROP Symposium

#### LABORATORY EQUIPMENT AND COMPUTER SOFTWARE:

- Trimble GPS and Brunton Transit Compass
- Buehler Petro-Thin Section System
- Siemens D5000 X-ray Diffractometer
- Transmitting and reflected light polarizing microscopes
- Malvern Laser Particle Size Analyzer
- McCrone Crushing Mill
- SigmaPlot
- Crystal Draw
- Rock Jock

- PAST statistical program
- FrontPage
- InDesign
- ERDAS (Earth Resources Data Analysis System)

SERVICE:

- Organized and hosted an IUPUI colloquium speaker event, Dr. Henry Pollack, 2007 Noble Peace Prize winner along with IPCC colleagues (2009)
- Mentoring undergraduate researchers (2007-2009)
- IUPUI School of Science Graduate Student Organization Department of Earth Science Representative (2008-present)
- Member of The American Quaternary Association (2008-present)
- Member of Geological Society of America (2008-present)
- Student Representative of the IUPUI Geology Club (2006-2007)
- Member of the IUPUI Geology Club (2005-present)
- Member of EarthWatch Institute (2004-present)
- Volunteer for EarthWatch Institute Research Expeditions, Belize, Central America (June 2004)